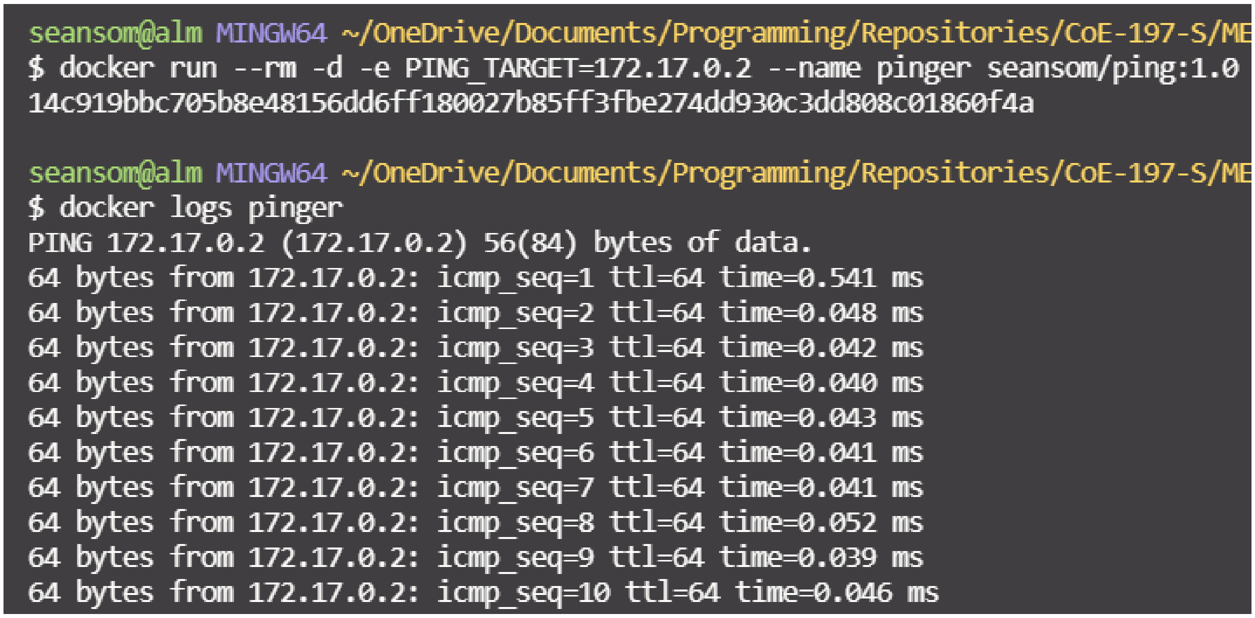
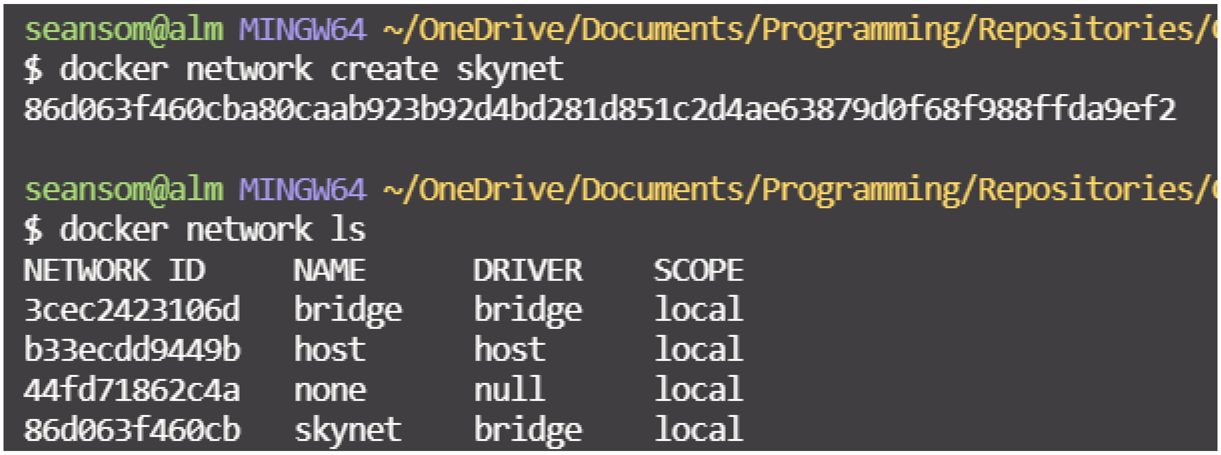
1. Running containers that use the network

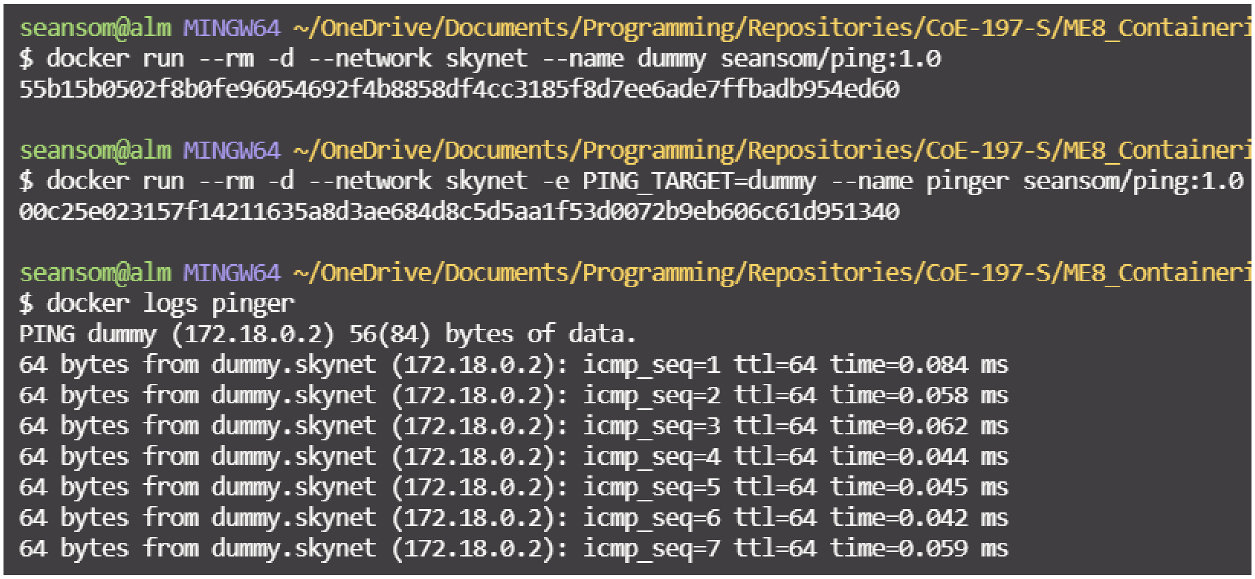


```
seansom@alm MINGW64 ~/OneDrive/Documents/Programming/Repositories/CoE-197-S/ME
$ docker run --rm -d -e PING_TARGET=172.17.0.2 --name pinger seansom/ping:1.0
14c919bbc705b8e48156dd6ff180027b85ff3fbe274dd930c3dd808c01860f4a

seansom@alm MINGW64 ~/OneDrive/Documents/Programming/Repositories/CoE-197-S/ME
$ docker logs pinger
PING 172.17.0.2 (172.17.0.2) 56(84) bytes of data.
64 bytes from 172.17.0.2: icmp_seq=1 ttl=64 time=0.541 ms
64 bytes from 172.17.0.2: icmp_seq=2 ttl=64 time=0.048 ms
64 bytes from 172.17.0.2: icmp_seq=3 ttl=64 time=0.042 ms
64 bytes from 172.17.0.2: icmp_seq=4 ttl=64 time=0.040 ms
64 bytes from 172.17.0.2: icmp_seq=5 ttl=64 time=0.043 ms
64 bytes from 172.17.0.2: icmp_seq=6 ttl=64 time=0.041 ms
64 bytes from 172.17.0.2: icmp_seq=7 ttl=64 time=0.041 ms
64 bytes from 172.17.0.2: icmp_seq=8 ttl=64 time=0.052 ms
64 bytes from 172.17.0.2: icmp_seq=9 ttl=64 time=0.039 ms
64 bytes from 172.17.0.2: icmp_seq=10 ttl=64 time=0.046 ms
```

2. Creating a network and assigning it to containers

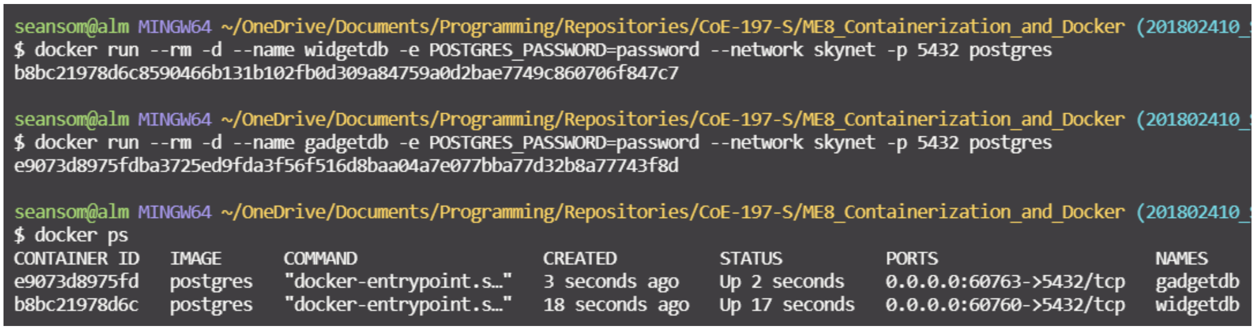


```
seansom@alm MINGW64 ~/OneDrive/Documents/Programming/Repositories/(
$ docker network create skynet
86d063f460cba80caab923b92d4bd281d851c2d4ae63879d0f68f988ffda9ef2

seansom@alm MINGW64 ~/OneDrive/Documents/Programming/Repositories/(
$ docker network ls
NETWORK ID     NAME      DRIVER    SCOPE
3cec2423106d   bridge    bridge    local
b33ecdd9449b   host      host      local
44fd71862c4a   none      null      local
86d063f460cb   skynet    bridge    local
```

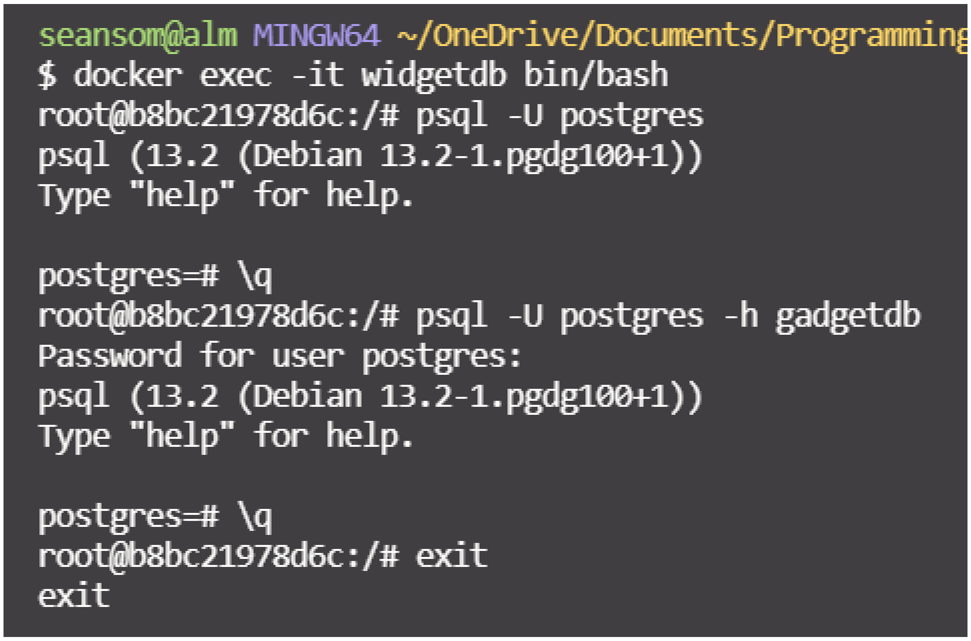


```
seansom@alm MINGW64 ~/OneDrive/Documents/Programming/Repositories/CoE-197-S/ME8_Containeri
$ docker run --rm -d --network skynet --name dummy seansom/ping:1.0
55b15b0502f8b0fe96054692f4b8858df4cc3185f8d7ee6ade7ffbadb954ed60

seansom@alm MINGW64 ~/OneDrive/Documents/Programming/Repositories/CoE-197-S/ME8_Containeri
$ docker run --rm -d --network skynet -e PING_TARGET=dummy --name pinger seansom/ping:1.0
00c25e023157f14211635a8d3ae684d8c5d5aa1f53d0072b9eb606c61d951340

seansom@alm MINGW64 ~/OneDrive/Documents/Programming/Repositories/CoE-197-S/ME8_Containeri
$ docker logs pinger
PING dummy (172.18.0.2) 56(84) bytes of data.
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=1 ttl=64 time=0.084 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=2 ttl=64 time=0.058 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=3 ttl=64 time=0.062 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=4 ttl=64 time=0.044 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=5 ttl=64 time=0.045 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=6 ttl=64 time=0.042 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=7 ttl=64 time=0.059 ms
```

3. Connecting between containers in a network

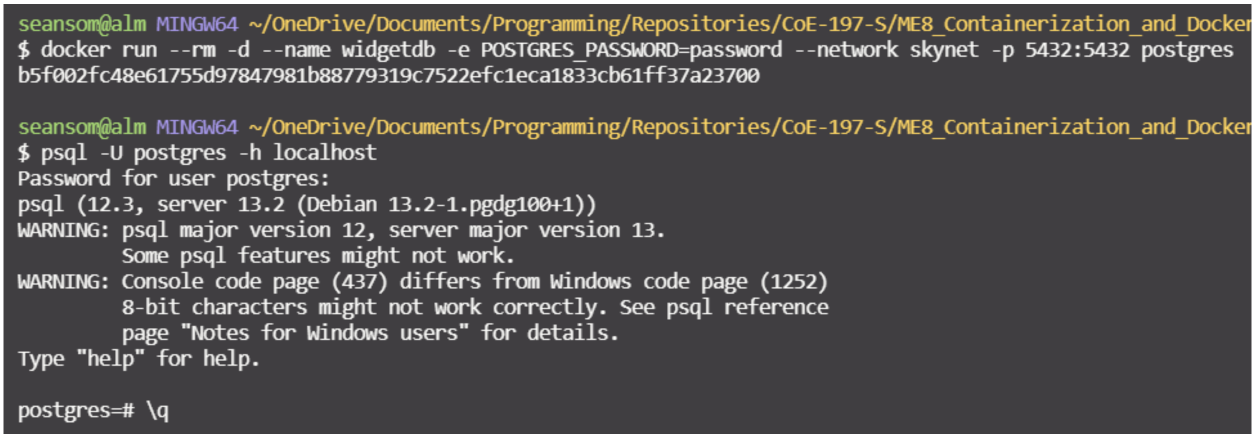


```
seansom@alm MINGW64 ~/OneDrive/Documents/Programming/Repositories/CoE-197-S/ME8_Containerization_and_Docker (201802410_
$ docker run --rm -d --name widgetdb -e POSTGRES_PASSWORD=password --network skynet -p 5432 postgres
b8bc21978d6c8590466b131b102fb0d309a84759a0d2bae7749c860706f847c7

seansom@alm MINGW64 ~/OneDrive/Documents/Programming/Repositories/CoE-197-S/ME8_Containerization_and_Docker (201802410_
$ docker run --rm -d --name gadgetdb -e POSTGRES_PASSWORD=password --network skynet -p 5432 postgres
e9073d8975fdba3725ed9fda3f56f516d8baa04a7e077bba77d32b8a77743f8d

seansom@alm MINGW64 ~/OneDrive/Documents/Programming/Repositories/CoE-197-S/ME8_Containerization_and_Docker (201802410_
$ docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED          STATUS          PORTS                     NAMES
e9073d8975fd   postgres   "docker-entrypoint.s…"   3 seconds ago    Up 2 seconds    0.0.0.0:60763->5432/tcp   gadgetdb
b8bc21978d6c   postgres   "docker-entrypoint.s…"   18 seconds ago   Up 17 seconds   0.0.0.0:60760->5432/tcp   widgetdb
```



```
seansom@alm MINGW64 ~/OneDrive/Documents/Programming
$ docker exec -it widgetdb bin/bash
root@b8bc21978d6c:/# psql -U postgres
psql (13.2 (Debian 13.2-1.pgdg100+1))
Type "help" for help.

postgres=# \q
root@b8bc21978d6c:/# psql -U postgres -h gadgetdb
Password for user postgres:
psql (13.2 (Debian 13.2-1.pgdg100+1))
Type "help" for help.

postgres=# \q
root@b8bc21978d6c:/# exit
exit
```

4. Binding port to host



```
seansom@alm MINGW64 ~/OneDrive/Documents/Programming/Repositories/CoE-197-S/ME8_Containerization_and_Docker
$ docker run --rm -d --name widgetdb -e POSTGRES_PASSWORD=password --network skynet -p 5432:5432 postgres
b5f002fc48e61755d97847981b88779319c7522efc1eca1833cb61ff37a23700

seansom@alm MINGW64 ~/OneDrive/Documents/Programming/Repositories/CoE-197-S/ME8_Containerization_and_Docker
$ psql -U postgres -h localhost
Password for user postgres:
psql (12.3, server 13.2 (Debian 13.2-1.pgdg100+1))
WARNING: psql major version 12, server major version 13.
         Some psql features might not work.
WARNING: Console code page (437) differs from Windows code page (1252)
         8-bit characters might not work correctly. See psql reference
         page "Notes for Windows users" for details.
Type "help" for help.

postgres=# \q
```